#### § 3592.2

(10) The method of abandonment of operations on Federal or Indian lease(s), license(s), and permit(s) proposed to protect the unmined recoverable reserves and other resources, including the method proposed to fill in, fence or close all surface openings which are a hazard to people or animals. Abandonment of operations also is subject to the provisions of subpart 3595 of this title; and

(11) Any additional information that the authorized officer deems necessary for approval of the plan.

(d)(1) Approved exploration and mining plans may be modified at any time to adjust to changed conditions or to correct an oversight. To obtain approval of an exploration or mining plan modification, the operator/lessee shall submit a written statement of the proposed modification and the justification for such modification. Any proposed exploration or mining plan modification(s) shall not be implemented unless previously approved by the authorized officer.

(2) The authorized officer may require a modification to the approved exploration or mining plan if conditions warrant.

(e) If circumstances warrant, or if development of an exploration or mining plan for the entire operation is dependent upon unknown factors which cannot or will not be determined except during the progress of the operations, a partial plan may be approved and supplemented from time to time. The operator/lessee shall not, however, perform any operation except under an approved plan.

## §3592.2 Maps of underground workings and surface operations.

Maps of underground workings and surface operations shall be drawn to a scale acceptable to the authorized officer. All maps shall be appropriately marked with reference to Government land marks or lines and elevations with reference to sea level. When required by the authorized officer, vertical projections and cross sections shall accompany plan views. Maps shall be based on accurate surveys and certified by a professional engineer, professional land surveyor or other professionally qualified person. Accurate copies of

such maps or reproductive material or prints thereof shall be furnished by the operator to the authorized officer when and as required.

#### § 3592.3 Production maps.

(a) The operator shall prepare maps which show mineral production from the leased lands. All excavations in each separate bed or deposit shall be shown in such a manner that the production of minerals for any royalty period can be accurately ascertained. Maps submitted for in situ or solution mining shall show pipelines, meter locations, or other points of measurenecessary for production verification. Production maps shall be submitted to the authorized officer at the end of each royalty reporting period or on a schedule determined by the authorized officer. As appropriate or required by the authorized officer, production maps also shall show surface boundaries, lease boundaries and topography, including subsidence resulting from mining activities.

(b) In the event of failure of the operator to furnish the maps required by this section, the authorized officer shall employ a licensed mine surveyor to make a survey and maps of the mine, and the cost thereof shall be charged to and promptly paid by the operator/lessee.

(c) If the authorized officer believes any map submitted by an operator/lessee is incorrect, the authorized officer may cause a survey to be made, and if the survey shows the map submitted by the operator/lessee to be substantially incorrect in whole or in part, the cost of making the survey and preparing the map shall be charged to and promptly paid by the operator/lessee.

# Subpart 3593—Bore Holes and Samples

### § 3593.1 Core or test hole cores, samples, cuttings.

(a) The operator/lessee shall submit promptly to the authorized officer a signed copy of records of all core or test holes made on the lands covered by the lease, license or permit. The records shall be in a form that will allow the position and direction of the holes to be located on a map. The